

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of :  
Alexander KAMYSHNY et al. :  
Serial No. Not yet assigned : Group Art Unit:  
Filed: herewith : Examiner: N/A  
For: DIAGNOSTIC BEADS FOR THE DETECTION OF BLOOD IN ANIMAL EXCRETA  
AND A METHOD FOR PRODUCTION THEREOF

**PRELIMINARY AMENDMENT**

ASSISTANT COMMISSIONER FOR PATENTS  
Washington, D.C. 20231

Dear Sir:

Preliminary to examination of the above-referenced application, please amend the  
application:

**IN THE CLAIMS:**

Please amend claims 9 and 16 as follows:

9. (Amended) Diagnostic beads according to claim 1, wherein the binder is a starch derivative.

16. (Amended) An animal litter for the detection of blood in animal excreta comprising diagnostic beads, as defined in claim 1.

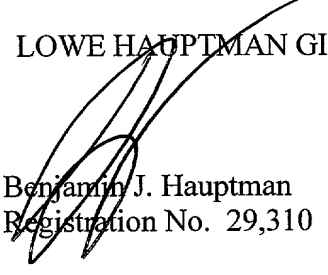
**REMARKS**

The above-referenced application is amended to delete the multiple dependencies of claim 16 and to have claim 9 conform with U.S. Patent practices.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached pages are captioned "Marked-Up Version Showing Changes".

Respectfully submitted,

LOWE HAUPTMAN GILMAN & BERNER, LLP



Benjamin J. Hauptman  
Registration No. 29,310

**DATE: March 5, 2002**

1700 Diagonal Road, Suite 310

Alexandria, Virginia 22314

Telephone: (703) 684-1111

Facsimile: (703) 518-5499

BJH:ayw

## MARKED-UP VERSION SHOWING CHANGES

### Claims

1. Diagnostic beads for the detection of occult blood in animal excreta, especially for use in an animal litter, comprising a particulate material and a detection composition attached to said particulate material, wherein the detection composition comprises a chromogen, a peroxide, an enhancer, a stabilizer, and a binder, said chromogen being selected to react with occult blood in the animal excreta so as to produce a visible and immediate color change when excreta containing blood comes into contact with said diagnostic beads.
2. Diagnostic beads according to claim 1, wherein the particulate material comprises a cat litter- absorbent material.
3. Diagnostic beads according to claim 1, wherein the particulate material comprises a material having the shape and size of the cat litter material.
4. Diagnostic beads according to claim 1, wherein the particulate material is selected from the group consisting of: wood-based beads, wood-based beads coated with titanium dioxide, wood-based beads coated with calcium carbonate, wood-based beads coated with starch, silica gel beads, quartz beads, polystyrene beads, alumino silicates, clay and cellulose beads.
5. Diagnostic beads according to claim 1, wherein the chromogen is 3,3 5,5-tetramethylbenzidine.
6. Diagnostic beads according to claim 1, wherein the enhancer is 6-methoxyquinoline.
7. Diagnostic beads according to claim 1, wherein the peroxide is cumene hydroperoxide.
8. Diagnostic beads according to claim 1, wherein the stabilizer is ascorbic acid.
9. Diagnostic beads according to claim 1, wherein the binder is a starch derivative.
10. Diagnostic beads according to claim 1, wherein the binder comprises an organic polymer capable of adhering to the particulate material.
11. Diagnostic beads according to claim 9, wherein the organic polymer material is selected from the group consisting of polyvinyl pyrrolidone, carboxymethyl cellulose, ethyl cellulose, and acrylic latex.
12. Diagnostic beads according to claim 1, further comprising at least one additional

## MARKED-UP VERSION SHOWING CHANGES

- binder and an inorganic filler.
13. Diagnostic beads according to claim 11, wherein the organic filler is selected from at least one of calcium carbonate and alumina.
  14. Diagnostic beads according to claim 1, further comprising at least one additive.
  15. Diagnostic beads according to claim 14, wherein the additive is selected from the group consisting of wetting agents or metal ion sequestrants.
  16. An animal litter for the detection of blood in animal excreta comprising diagnostic beads, as defined in any one of <sup>claim 1</sup> claims 1 - 13.
  17. An animal litter according to claim 16, comprising 1-100% diagnostic beads.
  18. An animal litter according to claim 16, comprising 5-10% diagnostic beads.
  19. An animal litter according to claim 16, wherein the animal litter is a cat litter.
  20. A method for producing diagnostic beads useful for the detection of occult blood in animal excreta, comprising producing a detection composition and applying said detection composition to a particulate material, wherein the detection composition comprises a chromogen, a peroxide, an enhancer, a stabilizer, and a binder, said chromogen being selected to react to occult blood in animal excreta so as to produce a visible color change when excreta containing blood comes into contact with said diagnostic beads.
  21. A method according to claim 20, wherein the particulate material comprises a cat litter- absorbent material.
  22. A method according to claim 20, wherein the particulate material comprises a material having the shape and size of the cat litter material.
  23. A method according to claim 20, wherein the particulate material is selected from the group consisting of: wood-based beads, wood-based beads coated with titanium dioxide, wood-based beads coated with calcium carbonate, silica gel beads, quartz beads, polystyrene beads, alumino silicates, clay and cellulose beads.
  24. A method according to claim 20, wherein the chromogen is 3,3 5,5-tetramethylbenzidine.
  25. A method according to claim 20, wherein the enhancer is 6-methoxyquinoline.
  26. A method according to claim 20, wherein the peroxide is cumene hydroperoxide.
  27. A method according to claim 20, wherein the stabilizer is ascorbic acid.